Faculty of Information and Communication Technology, Mahidol University ITCS495 Special Topics in Database and Intelligent Systems Semester 1/2022

NoSQL Assignment (10%)

Group Assignment

Due Date: Friday 30th September 2022 11.00 P.M.

For this assignment, you need to complete the given tasks and write a report. You are required to select data. Then you need to select NoSQL Technology that are suitable for the selected data. They can be the ones lectured in the class or any NoSQL technology. The main goal of this assignment is to examine the understanding of the NoSQL technology and the use of them.

This assignment requires you to make a group of 4 persons.

Task1: Data selection (2%)

In this task, you are required to select data from any source. After you get data, you need to explain the data in a report in term of:

- 1. What is the purpose of this data?
- 2. Describe fields or attributes in the selected data.
- 3. Give reason why this data is suitable for implementing using NoSQL technology

Task2: NoSQL technology selection (3%)

In this task, you are required to select NoSQL technology for the selected data. Then you need to write a report about this NoSQL technology in term of:

- 1. What are the main features?
- 2. What are the tools/applications/services of this NoSQL technology? (at least 3 tools/applications/services)
- 3. Explain all tools/applications/services in term of provider and features

Task3: NoSQL implementation (5%)

In this task, you are required to implement the selected data in the selected NoSQL technology. You need to write a report to demonstrate the process to implement the selected data in the selected NoSQL technology in term of:

- 1. How to create all related databases.
- 2. How to import data into database.
- 3. Please come up with 3 queries with solutions regarding the selected data.

4. If the selected NoSQL technology is a service, you need to provide the service information and information to access it in order to ensure that the lecturers can access and give scores. However, if the selected NoSQL technology is implemented locally, you need to give the restore process and all related processes in order to ensure that the lecturers can access and give scores.

Formatting rules

- 1. The font used **Times New Roman** for the text, **size 12** and **1.5 line space**.
- 2. The report must be proof-read and spell-checked before submission.
- 3. The report needs to have heading for each task and all applicable sub-heading

Report Structure

- 1. Cover page that contains unit title, assignment title, your group members' full name and id, and group number
- 2. Task 1
- 3. Task 2
- 4. Task 3

Submission Requirements (Friday 30th September 2022 11.00 P.M.)

The report needs to be checked by Turnitin software to check similarity. The similarity **must not** be higher than 20%. Otherwise, the assignment will not be assessed.

You need to submit a .zip package (NoSQLAssignment_GroupName.zip) in submission slot on MyCourses containing

- 1. The report in pdf (named NoSQLAssignment_ GroupName.pdf)
- 2. The Turnitin report in pdf (named NoSQLAssignment_Turnitin_ GroupName.pdf)
- 3. All related files.

This must be **submitted by ONLY one group member, who have the smallest ID**. The report can be resubmitted any time before the assignment deadline. Your reports will be checked with Turnitin. If your similarity is **more than 20%**, your score will be **ZERO**.

Turnitin Instruction

In order to use Turnitin, you need to register for it first. You can register via this <u>link</u>. Note that if you have a Turnitin account, you do not register again. After you get an account, please enroll ITCS495 class using the following code:

Class ID: 35499014

Enrollment Key: SDB2022

Then you can get a similarity report by submitting your assignment report to the assignment slot on Turnitin.

If you have any question, please consult this <u>link</u>. In addition, you can contact librarian via liclturnitin@gmail.com

Late Submission

Late Assignments or extensions will not be accepted unless you submit a special consideration form and provide valid documentation such as a medical certificate prior to the submission deadline (NOT after).